

蝶と蛾 Tō to Ga

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DESCRIPTIONS OF THREE NEW SPECIES OF THE ARCHIPSINI FROM JAPAN¹⁾By ATSUSHI KAWABE²⁾

In writing this paper I wish to express my cordial thanks to Profs. N. YAGI and H. SAWADA of Tokyo Agricultural University for their advices, and also to Dr. H. INOUE for his constant kindness given to me in various ways in the course of my study. I am also indebted to Dr. J. RAZOWSKI, Zoological Institute, Polska Akademia Nauk, Krakow, for helpful suggestions on *Clepsis monticolana*. Thanks are also due to the following friends for their gifts of specimens : Messrs. M. HOSHINO, T. HARUTA, T. MAENAMI, H. YAMANAKA and H. YOKOYAMA.

Unless otherwise stated the type specimens designated in this paper are in my collection.

Clepsis monticolana sp. nov. (figs. 1-5, 9, 11)

Male : Length of forewing 8-11 mm. Antenna densely ciliated, dark brownish gray, slightly tinged with ochreous yellow. Palpus ochreous brown, paler on inner surface ; median segment dilated towards apex with slightly projecting scales above and beneath ; terminal segment shortly exposed and somewhat drooping. Head yellowish gray, slightly tinged with ochreous brown. Thorax without crest, silvery gray, somewhat tinged with pale yellowish ; patagium ochreous brown. Abdomen silvery gray, tinged with pale yellow ; anal tuft pale yellowish gray.

Forewing without costal fold. The ground color whitish gray to silvery gray, irregular cross lines at the terminal 1/3 of wing, sometimes vanishing ; the basal 1/5 of wing suffused with pale ochre-gray or without such coloration ; an oblique central fascia from about 1/3 of costa broadly diffused below and outwards, distinctly dark margined inner edge accompanying proximally a few small dark dots, but in some specimens this fascia is obsolescent.

Hindwing pale whitish gray. All the cilia above and beneath pale whitish gray, tinged with pale yellow.

Female : The length of the forewing as in that of the male. The forewing elongate, narrower than that of the male. The ground color of the forewing varying from dull ochre-gray to pale yellowish gray, with or without the trace fascia.

Male-genitalia (fig. 11) : Uncus very broad and dilate. Gnathos simple, much sclerotized, with a rounded tip. Socius indistinct, with some hairs. Transtilla weakly developed, united with dentate knobs. Sacculus broad, extending along the lower margin of the broad, rounded valva. Aedoeagus curved, with some minute thorns, whose number varies from five to more on the apical portion ;

1) Taxonomic studies of the Japanese Tortricinae (3) (Lepidoptera, Tortricidae); (1) : Tinea, 6(1/2) : 5-8, 1963 ; (2) : Trans. Lep. Soc. Jap., 14(3) : 70-75, 1963.

2) Hōsei Second High School, Kizuki, Kawasaki, Kanagawa Pref.

cornuti a sheaf of some spines.

Female-genitalia (fig. 9) : Sterigma rather narrow, without a projection at the either cephalic corner ; antrum a large and thick tube-shape. Ductus bursae long ; cestum absent. Bursa copulatrix large and rounded, weakly membranous, without signum.

Holotype (♂) and allotype (♀) : Mt. Tateyama, Toyama Pref., Honshu, 29-VII, 1962, A. KAWABE leg.

Paratypes : Mt. Tateyama, Toyama Pref., Honshu, 4-VIII, 1954, 1♂, H. YAMANAKA leg.; 8-VII, 1956, 11♂♂, 3♀♀ ; 10-VIII, 1957, 2♂♂, A. KAWABE leg.; 6-VIII, 1960, 5♂♂, 2♀♀, H. YAMANAKA leg.; 29-VIII, 1962, 23♂♂, 10♀♀, A. KAWABE leg. Besides the above specimens I examined many specimens collected at Goshikigahara, Mt. Tateyama, by H. YAMANAKA and Mt. Harinokidake, Nagano Pref., by T. MAENAMI.

The four male and two female paratypes are in the collection of Zoological Institute, Polska Akademia Nauk, Krakow.

The specimens from Mt. Norikura and Mt. Jōnen before the author cited below are smaller in the size of wings and genitalia than those used for the above description, and moreover they are much darker in color and slightly tinged with reddish brown in the ground color of the forewing of the female, but they completely agree with the typical specimens in the markings and the genital structures of the both sexes. However the specimens examined by the present author are still not enough to separate them as a geographical race of *Clepsia monticolana*.

Specimens examined : Mt. Norikura, Nagano Pref., Honshu, 10-VIII, 1953, 1♂, T. HARUTA leg.; 31-VIII, 1962, 16♂♂, 2♀♀, A. KAWABE leg.; Mt. Jōnen, Nagano Pref., 27-VII, 1951, 1♂, H. INOUE leg.

This species is closely similar to *Clepsia insignata* OKU from Japan in the genital structures, but distinguishable from it in much larger size, and especially in smaller number of the apical thorns of the aedoeagus and the sterigma without the lateral projections. The moths were collected at high altitude of central Honshu where the creeping pines (*Pinus pentaphylla* MAYR. or *Pinus pumila* REGEL) are dominant vegetations.

***Hastula hoshinoi* sp. nov.** (figs. 6, 10, 12)

Length of forewing 7 mm. Antenna shortly ciliated in male, simple in female, yellowish ochreous, segments distinctly annulated with brownish above. Palpus rather porrected, pale yellowish ochreous, somewhat mixed with brownish scales exteriorly, paler interiorly ; median segment dilated towards apex with somewhat rough scales ; terminal segment shortly exposed. Head loosely clothed with yellowish ochreous scales. Thorax including patagium yellowish brown, tinged with darkish scales, without crest. Abdomen grayish brown ; anal tuft grayish brown, tinged with yellowish.

Forewing without costal fold. The ground color glossy pale yellowish brown or fawn-brown, scattered in some specimens with darkish narrow striae on the costal, terminal and dorsal area ; a dark brown basal patch from the base of dorsum, disappeared above fold and not reaching costa, but its outer margin edged with a narrow dull cadmium yellow line, which reaches costa ; a broad dark middle fascia running from before 1/2 of costa, gently narrowing about the middle of its length, to near tornus ; an apical patch of the same color extending to near tornus ; a small spot at the middle of the wing, blackish brown. All the above described markings are broadly shaded

and edged with dull cadmium yellow along their margin. Cilia slightly paler than the ground color.

Hindwing grayish brown. Cilia paler than the ground color, somewhat tinged with yellow color.

Male-genitalia (fig. 12) : Uncus and gnathos very strongly sclerotized. Uncus short and thick, shortly projected at the basal corner of each side, tapering towards tip, shallowly hollowed at the middle. Socius drooping, very narrow lobe with long hairs. Gnathos well developed, formed a large plate at tip, which divided into three parts ; one is a short middle thorn, and the others large projections at both sides, irregularly dentate along its edge. Transtilla a slender band. Valva narrowly elongate. Sacculus with a patch of thorns at about the middle, narrowing towards the lower angle of valva. Aedoeagus very small, abruptly curved beyond the apical 1/2 of it and somewhat narrowed towards tip ; cornuti some minute short spines.

Female-genitalia (fig. 10) : Ductus bursae narrow and long, without cestum. Bursa copulatrix a very small, ball-shape, with a small signum. The 8th abdominal segment formed a broad, rounded sclerotized plate densely covered with minute spines on the middle portion. Limen broad, with short lateral projections.

Holotype : ♂, Setagaya, Tokyo, Honshu, 16-VI, 1963, A. KAWABE leg.

Allotype : ♀, Setagaya, Tokyo, Honshu, 6-VI, 1963, A. KAWABE leg.

Paratypes : Kanaya, Shizuoka Pref., Honshu, 19-VI, 1952, 7 ♂♂, M. HOSHINO leg.; Setagaya, Tokyo, Honshu, 22-VI, 1963, 1 ♂ ; 29-VI, 1963, 1 ♀ ; 5-VIII, 1963, 1 ♂, A. KAWABE leg.

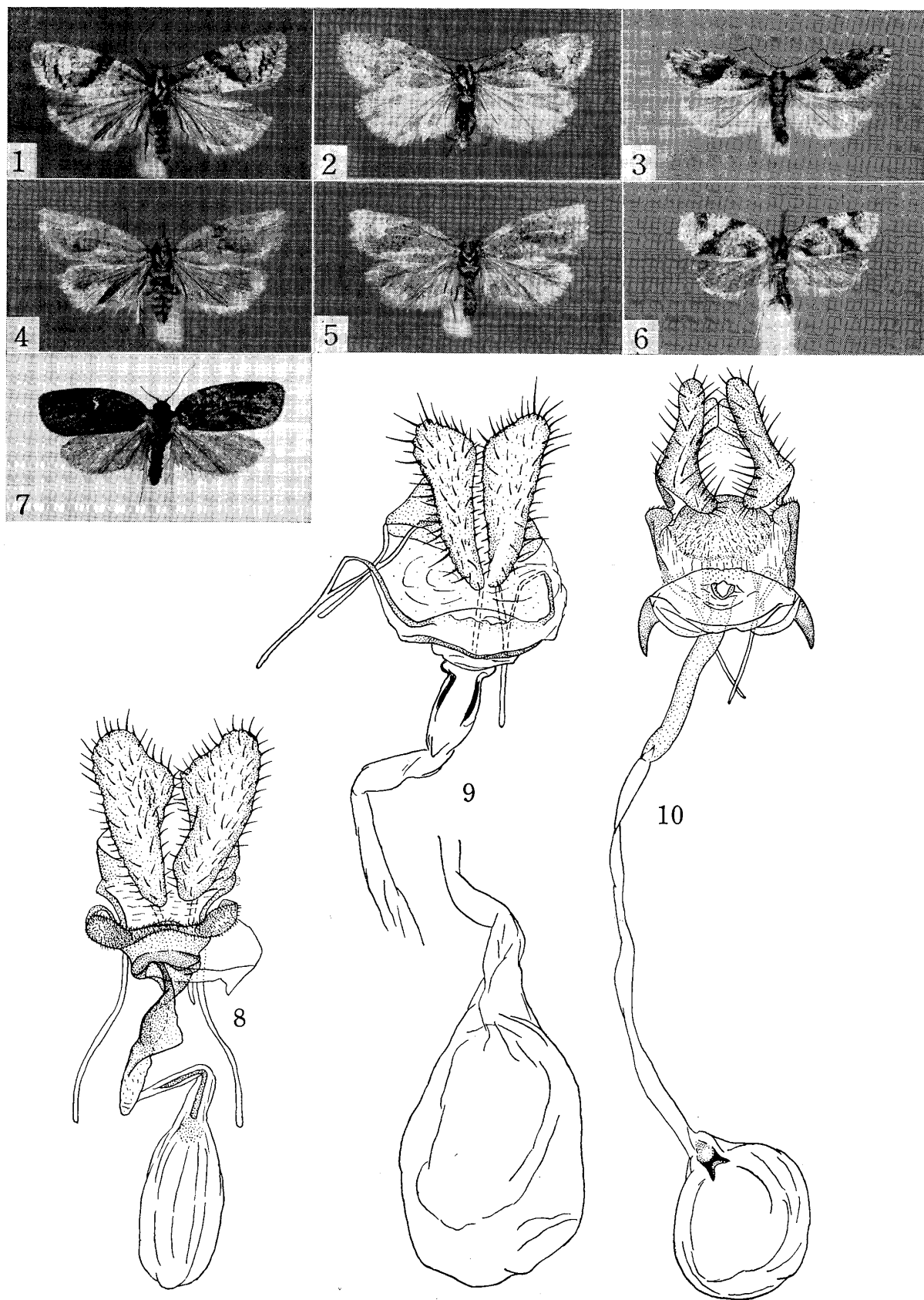
This species is closely similar to *Epagoge grotiana* (FABR.) from Europe in the external structures, especially in the neururation of the both wings, and the markings and the coloration of the forewing, but referred to the genus *Hastula* because of the regard peculiar gnathos of the male genitalia. However, its generic position will be disputable in the future study.

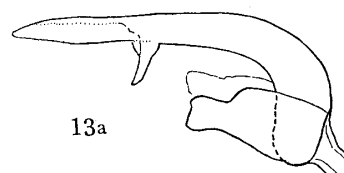
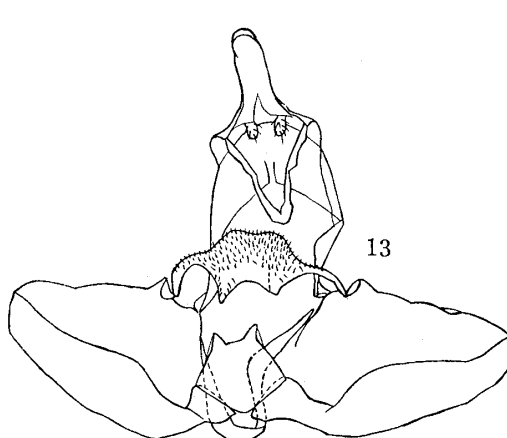
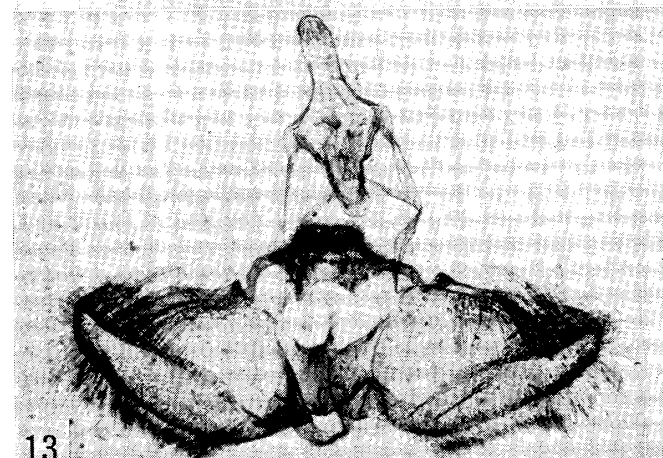
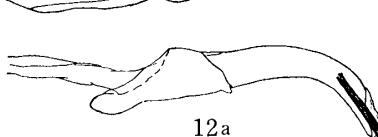
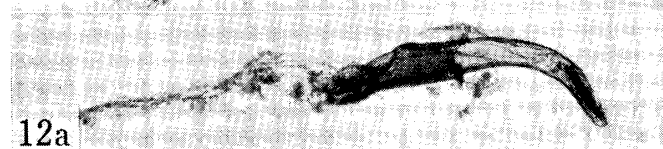
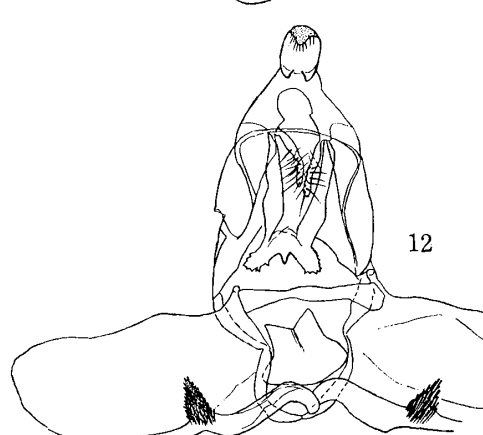
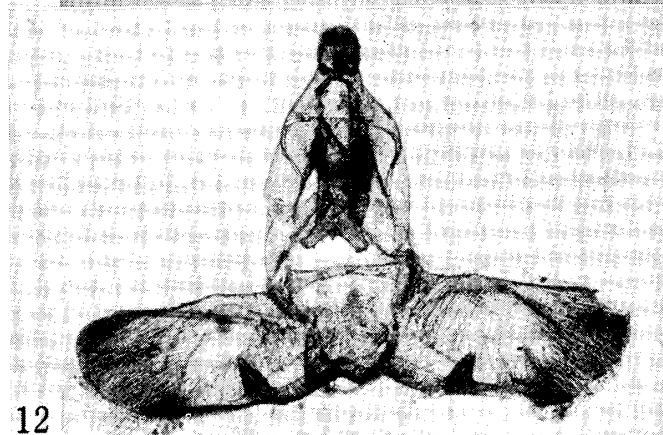
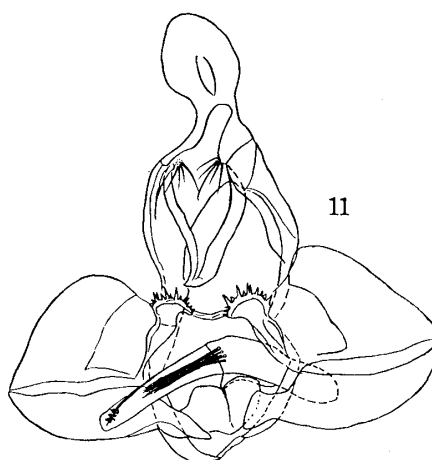
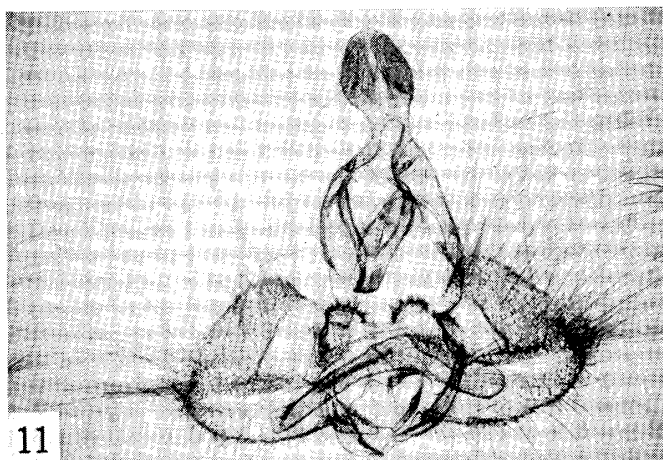
***Philedone violetana* sp. nov.** (figs. 7, 8, 13)

Male : Length of forewing 6-8 mm. Antenna slightly pectinated, with strong cilia from short projection of each segment, dark brown-purple basally, paler towards tip. Palpus slender, dark brown-purple ; median segment narrow, not dilated apically ; terminal segment moderately long. Head and thorax dark brown-purple, shining deep blackish purple in the certain lights. Thorax without crest. Abdomen silvery gray, slightly tinged with lilac ; anal tuft pale grayish yellow or white.

Forewing without costal fold. The ground color grayish brown (dark beige) to dark grayish brown, overspreads with many glossy purple scales or spots, especially densely on the costal area, the tornal area and the area between the markings ; an obscure basal patch angulated outwards on fold, dotted with some purple spots at above than on fold ; an oblique central fascia from 1/3 of costa narrowed above, broadened below ; its inner edge sinuate, running to before 1/2 of dorsum, inwardly curved at 1/2 of the wing ; its outer edge indistinctly diffused below ; a narrow apical patch from 1/2 of costa to before apex, extending from the posterior end of it towards 1/2 of tornus ; two minute spots near apex in some specimens ; all the above mentioned markings black-purple, not suffused and mixed with shining purple scales or spots ; a small scale-projection on the base of dorsum. Cilia paler than the ground color.

Hindwing and cilia brownish cinereous, rather pale apically.





Female : Length of forewing 10-11 mm. Antenna simple. Forewing moderately elongate; costa curved anteriorly, scarcely sinuate posteriorly, without costal fold, apex little angulate above, straight and rounded below. The other essential structures as described for male.

Male-genitalia (fig. 13) : Uncus scarcely dilated towards tip. Socius minute lobe with some hairs. Gnathos arm narrow, with a dilated and blunt tip. Valva triangular form, narrowing towards the apex of the outer margin, with a narrow, obscure sclerotized costa, which triangularly knotted at the basal area of costa. Sacculus attached to the valva, widely developed along the lower margin and extending towards the apex of valva. Transtilla a broad well-sclerotized sculptured plate with minute spines, but very narrowed at each side of it. Aedoeagus much sclerotized slightly dilated and strongly curved basally, straightened towards apex, which slowly pointed, with a horn beyond half of the lower margin of it.

Female-genitalia (fig. 10) : Ovipositor lobe broadly dilating towards tip. Limen narrow with a rising spinal plate at the caudal margin, broadened and rounded at each side. Antrum long and strongly sclerotized, inclined at the caudal portion, inner surface covered with almost invisible minute spines at the cephalic portion. Ductus bursae very short; cestum a very weak band. Bursa copulatrix weakly membranous with scarcely sclerotized portion near the entrance of ductus bursae.

Holotype : ♂, Nippara, Tokyo, Honshu, 16-IX, 1963, A. KAWABE leg.

Paratypes : Mt. Tateyama, Toyama Pref., Honshu, 6-VII, 1956, 1 ♀, A. KAWABE leg.; Nippara, Tokyo, Honshu, 16-IX, 1963, 1 ♂, A. KAWABE leg.; Mt. Takao, Tokyo, Honshu, 9-IX, 1950, 1 ♀, H. INOUE leg.; 9-VI, 1950, 1 ♂; 24-VI, 1951, 1 ♂, 1 ♀; 25-VI, 1952, 2 ♂ ♂; 4-VII, 1952, 1 ♂, M. HOSHINO leg.; 12-VII, 1961, 1 ♂, A. KAWABE leg.; Hirakura, Mie Pref., Honshu, 20-24-VI, 1961, 1 ♂, 1 ♀, H. YOKOYAMA leg.

Explanation of figures

1. *Clepsia monticolana* sp. nov., ♂ (from Mt. Tateyama) -Holotype-
2. ditto, ♂ (from Mt. Tateyama) -Paratype-
3. ditto, ♂ (from Mt. Norikura)
4. ditto, ♀ (from Mt. Tateyama) -Allotype-
5. ditto, ♀ (from Mt. Tateyama) -Paratype-
6. *Hastula hoshinoi* sp. nov., ♂ -Holotype-
7. *Philedone violetana* sp. nov., ♂ -Holotype-
8. ditto, ♀-genitalia -Paratype-
9. *Clepsia monticolana* sp. nov., ditto
10. *Hastula hoshinoi* sp. nov., ditto
11. *Clepsia monticolana* sp. nov., ♂-genitalia -Paratype-
12. *Hastula hoshinoi* sp. nov., ♂-genitalia, a, aedoeagus -Paratype-
13. *Philedone violetana* sp. nov., ditto

摘 要

この報文では下記の 3 属 3 新種を記載した。

Clepsis monticolana KAWABE タカネハイイロハマキ (新称)

本種は立山の弥陀ヶ原、五色ヶ原や針木岳から得た多数の標本にもとづき記載した。しかし乗鞍岳、常念岳からの個体は前記地域の個体より、一般に小型で、色彩はより暗色をおび、特に雌の前翅の地色に多少赤色を加味する。しかしながら、それら以外の外部形態及び前翅斑紋様式、雌雄交尾器の形態では、特に両者を区別する特徴を発見出来なかったため、ここでは同種として扱った。又本種は大雪山から報告された *Clepsis insignata* OKU ダイセツチビハマキ (新称) と外部表徴及び雌交尾器の形態において明らかな差異を現わすが、雄交尾器の形態はきわめて似ている。又常念岳、南アルプス等のハイマツ帯に分布し、本種に近似し、明らかに新種と考えられる個体を発見しているが、前記同様雄交尾器の形態において顕著な差異がみられない (個体数不足のため記載をさけた)。

なお、本種はハイマツ帯に限って分布し、日中、ハイマツをたたくと普通にみられるものであるが、弥陀ヶ原 (1900m) にはハイマツの群落がなく、五葉松の群落であることも今後の本種の分類学的研究を進める上で留意しなければならないと考える。しかし本種の食草がハイマツであるかどうかはまだ確認していない。*Clepsis insignata* の確認に際し御助力下された奥俊夫氏にここでお礼を申しあげる。

Hastula hoshinoi KAWABE ホシノハマキ (新称)

本種は交尾器の形態から *Hastula* 属の種として扱ったが、外部形態はヨーロッパの *Epagoge grotiana* (FABR.) や本邦で *Epagoge grotiana* トビハマキと呼ばれている種ときわめて似ている。本邦のトビハマキは *E. grotiana* とは明らかに別種で、おそらく新種と考えられる。

Philedone violetana KAWABE クシヒゲムラサキハマキ (新称)

本属の種は旧北区から 1 種のみが知られており、雄の触角が楕円状 (本種はむしろ鋸歯状) を呈し、前翅の翅脈 7 と 8 が有柄で、雄の交尾器の transtilla が小針を密生するのが特徴である。上記の形態を示し、全体が黒紫色をおびる本種はこれまでに本邦から記録されたとの種とも容易に区別出来る。

Additions and corrections to "Descriptions of three new and one unrecorded species of the genus *Acleris* Hb.". Taxonomic studies of the Japanese Tortricinae (2). 1963, Trans. Lep. Soc. Jap., 14(3):70-75.

All the holotypes designated in that paper are males.

P. 70, line 4 for Insitute read : Institute.

P. 70, line 8 for *dicolor* read : *bicolor*.

P. 70, line 9 for palpus read : Palpus.

P. 70, line 12 ; p. 71, line 8; p. 72, line 2 for anal tufts read : anal tuft.

P. 70, line 32; p. 71, line 31 for Ussui read : Usui.

P. 75, 摘要の上から 3 行目の 11 月を 9 月に訂正.